

DOH 150-203 March 2023

## Contents

Technical notes, definitions, and data limitations	1
Hepatitis C overview	2
What is hepatitis C?	2
What is the difference between hepatitis A, B and C?	2
What is the difference between acute and chronic hepatitis C infections?	2
How does hepatitis C spread?	2
Who should get tested for hepatitis C?	2
How many people have hepatitis C in the United States?	2
Frequently asked questions	3
What kind of data does the Hepatitis C Surveillance Program at DOH collect?	3

Why is the Hepatitis C Surveillance Program unable to collect additional data on race and	
ethnicity, potential exposure, and treatment information?	3
How many people are currently living with hepatitis C in WA?	3
Is there a way to estimate how many people have received treatment in WA each year, or	٢
how much treatment costs each year?	3
How much money does DOH receive to conduct hepatitis C surveillance and prevention	
activities?	3
How many people have been diagnosed with hepatitis C in WA?	4
2021	4
2017-2021	5
County of residence, 2021	5
Who has been diagnosed with hepatitis C in WA in 2021?	5
Injection drug use (IDU) is a common risk factor for acute hepatitis C	7
Pregnancy and risk for perinatal hepatitis C	7
For more information	7
References	7
Contact information	7

To request this document in another format, call 1-800-525-0127. Deaf or hard of hearing customers, please call 711 (Washington Relay) or email <u>civil.rights@doh.wa.gov</u>.

## Technical notes, definitions, and data limitations

- Hepatitis C data for years 2017-2021 were extracted from the Washington Disease Reporting System (WDRS) in September 2022.
- **Cases** (as in, e.g., hepatitis C case reporting/investigation/count) refers to persons diagnosed with a disease or condition (e.g., hepatitis C infection).
- Acute and chronic case counts include both probable and confirmed cases, based on CDC surveillance case definitions: <u>https://ndc.services.cdc.gov/</u>.
- Rates per 100,000 persons, also known as "crude" or "unadjusted" rates, are calculated by dividing the number of events (e.g., case reports) of interest by the population (e.g., county, state, United States) for a given time period (e.g., one year), multiplied by 100,000. A rate is a measure of how often an event occurs in a population over a given time period.
- Due to the impact of the COVID-19 pandemic, the number of hepatitis C cases reported to the Washington State (WA) Department of Health (DOH) in 2020 and 2021 may be artificially low. Data should be interpreted with caution due to the impacts of the pandemic on availability of hepatitis C screening, linkage to care, and investigative resources.

## Hepatitis C overview

## What is hepatitis C?

Hepatitis C is a liver infection caused by the hepatitis C virus (HCV). It is the most common bloodborne infection in the United States.

# What is the difference between hepatitis A, B and C?

Hepatitis A, B and C are different viruses that infect the liver. They share many signs and symptoms, but people can become infected in different ways. While there are effective vaccines to prevent hepatitis A and B, there is no vaccine to prevent hepatitis C. However, people with hepatitis C can be treated and cured.

# What is the difference between acute and chronic hepatitis C infections?

Acute hepatitis C is a new infection. It occurs within the first six months after someone is exposed to hepatitis C virus. Acute hepatitis C can cause a short-term illness or no symptoms, but if left untreated, acute infection can lead to chronic infection.

**Chronic hepatitis C** is a lifelong infection that may occur if acute hepatitis is left untreated. It can cause serious health problems such as liver damage, severe scarring and impairment of the liver (cirrhosis), liver cancer, and even death.

## How does hepatitis C spread?

Hepatitis C usually spreads through contact with blood from an infected person. Today, most people become infected by sharing druginjection equipment. Other ways hepatitis C can spread include through birth, health care exposures, sex with an infected person, unregulated tattoos/body piercings, sharing personal items that may have had contact with blood, and through blood transfusion or organ transplants (rare since 1992).

## Who should get tested for hepatitis

C? Those who:

- Are 18 years of age and older (get tested at least once in your lifetime)
- Are pregnant (get tested during each pregnancy)
- Currently inject drugs (get tested regularly)
- Have ever injected drugs, even if it was just once or many years ago
- Meet any other testing criteria: <u>https://www.cdc.gov/hepatitis/hcv/cfaq</u> <u>.htm</u>

#### How many people have hepatitis C in the United States?

In 2016, an estimated 2.4 million people were living with chronic hepatitis C in the United States.

In 2020, a total of 4,798 cases of acute hepatitis C were reported in the United States. Considering that many people do not have symptoms and do not get tested for hepatitis C, the Centers for Disease Control and Prevention (CDC) believes the actual number of acute cases occurring in 2020 was probably closer to 66,700.

The number of acute cases reported in the United States has increased every year since 2013. In 2020, the number of acute cases reported in the United States was over double that of 2013 — a 124% increase.

# Frequently asked questions

## What kind of data does the Hepatitis C Surveillance Program at DOH collect?

Most hepatitis C reporting comes from laboratory reports. Information in laboratory reports is limited and typically includes name, birth date, sex/gender, and place of residence.

Laboratory reports very rarely include race and ethnicity information. Laboratory reports **do not** contain information such as how someone became infected with hepatitis C, hepatitis C treatment status, or insurance status.

## Why is the Hepatitis C Surveillance Program unable to collect additional data on race and ethnicity, potential exposure, and treatment information?

Despite being legally required, case reporting from healthcare providers is rare, so most hepatitis C information comes from laboratory reports.

When capacity permits, public health investigators at the state and local levels may follow up with patients or healthcare providers to obtain additional information. However, hepatitis C surveillance in public health is under-funded and under-resourced compared to the volume of cases; many jurisdictions are only able to interview a small proportion of people with newly reported hepatitis C infections or cannot conduct any interviews at all.

#### How many people are currently living with hepatitis C in WA?

Due to surveillance data limitations, it is challenging to estimate the current burden of hepatitis C in WA.

A one-time funded analysis conducted by <u>CDA</u> <u>Foundation (CDAF)</u> estimated at the beginning of 2018 there were 59,100 people living with active hepatitis C infection in WA.

To continue producing current estimates, it would be necessary to expand the capacity of the Hepatitis C Surveillance Program to routinely gather information on how many people with hepatitis C infections have been cured, died, or moved out of state. Similar programs are funded for HIV surveillance systems and lead to accurate estimates of HIV rates and trends.

## Is there a way to estimate how many people have received treatment in WA each year, or how much treatment costs each year?

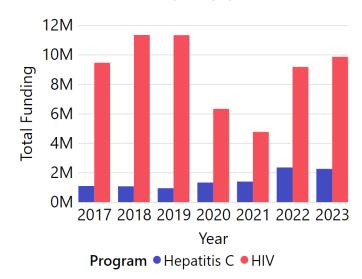
With the current scope of the surveillance program, we cannot accurately estimate how many people have received treatment or total costs of treatment in WA. To do this, we would need reliable reporting of negative hepatitis C tests and resources for expanding the information collected during case investigation.

## How much money does DOH receive to conduct hepatitis C surveillance and prevention activities?

The DOH Hepatitis C Surveillance and Prevention programs received about \$2 million in funds for each fiscal year 2022 and 2023. This is a marked increase from previous years.

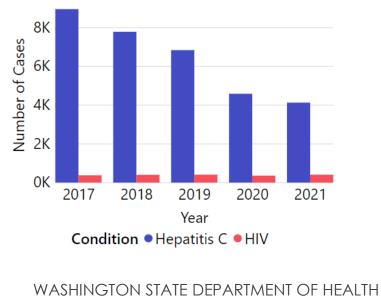
By comparison, DOH HIV Surveillance and Prevention programs received between over \$4 million to over \$11 million in funds for each fiscal year 2017-2023 (see Figure 1).

Figure 1. Hepatitis C and HIV Surveillance and Prevention Funding Comparison, 2017-2023



The number of newly diagnosed hepatitis C infections (including acute and chronic) was between 10-24 times higher than the number of newly diagnosed HIV infections for each year 2017-2021 (see Figure 2).





## How many people have been diagnosed with hepatitis C in WA?

#### 2021

In 2021, there were 122 newly diagnosed acute hepatitis C infections and 3,998 newly diagnosed chronic hepatitis C infections among people living in WA that were reported to DOH.

The statewide rate for new diagnoses was 1.6 acute and 51.5 chronic hepatitis C infections per 100,000 persons living in WA in 2021.

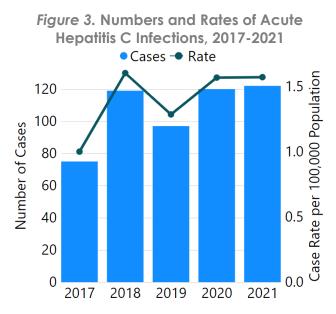
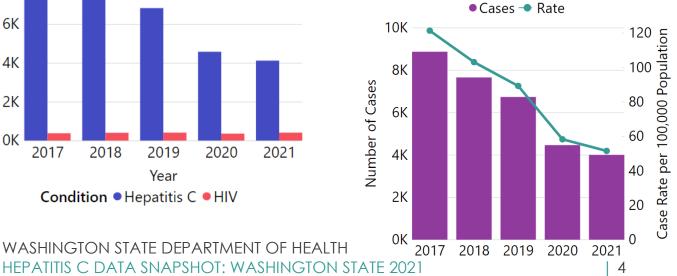


Figure 4. Numbers and Rates of Chronic Hepatitis C Infections, 2017-2021



#### 2017-2021

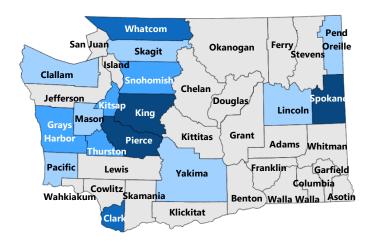
From 2017-2021, an average of 107 acute hepatitis C infections were reported annually, and the number of reported acute infections increased each year except 2019. In 2021, there was a 60% increase in the rate of acute infections from the 1.0 infections per 100,000 in 2017.

An average of 6,341 chronic hepatitis C infections were reported annually from 2017-2021 (average rate of 84.6 per 100,000 persons). The decrease in newly reported case counts and rates of chronic hepatitis C infections from 2017-2021 may be due to reduced reporting during the COVID-19 pandemic in 2020 and 2021, along with a transition to a new disease surveillance system in 2018, which allowed for improved identification of new infections and reduced duplicate person information in the surveillance system. Chronic and acute hepatitis C are still a public health concern in WA.

## County of residence, 2021

There were 16 counties that reported one or more acute hepatitis C infections in 2021 (see *Figure 4*).

Figure 4. Number of Acute Hepatitis C Infections Mapped by County, 2021 Number of Cases 0 0 1 03-4 011-16 018-29

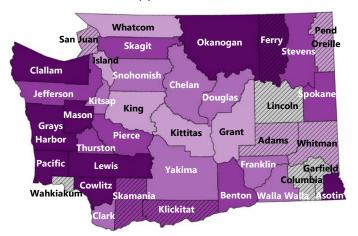


# All counties reported one or more chronic hepatitis C infections in 2021 (see *Figure 5*).

Figure 5. Rate of Chronic Hepatitis C Infections Mapped by County, 2021

#### Cases/100,000 Population • 17-38 • 39-48 • 49-74

●75-158 ● Rate suppressed ØNot reliable rate (NR)

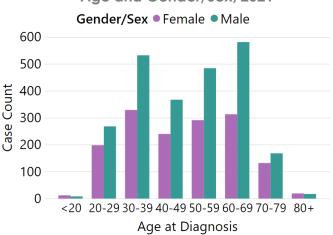


'Rate suppressed' indicates that there were <5 total chronic cases reported in the county. 'Not reliable rate (NR)' indicates that there were ≤16 chronic cases reported in the county.

There were 221 chronic infections diagnosed among people in correctional and other state facilities in 2021, which are not represented in Figure 5.

## Who has been diagnosed with hepatitis C in WA in 2021?

In 2021, newly reported chronic hepatitis C infections were highest among two age groups: people aged 50-69 (41.9%, with a peak at age 60), and people aged 20-39 (33.4%, with a peak at age 33). Most chronic infections were reported among males (60.9%) compared to females (38.5%) (see *Figure 6*).

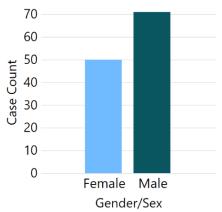


## Figure 6. Chronic Hepatitis C Infections by Age and Gender/Sex, 2021

In 2021, the largest group of reported acute infections (43.4%) were among people aged 25-34 (see *Figure 7*).

Figure 7. Acute Hepatitis C Infections by Age, 2021



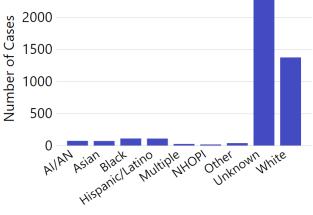


Most acute infections were reported among males (58.2%) compared to females (41%) (see *Figure 8*).

'Age' is age in years at the time of hepatitis C diagnosis. 'Gender/Sex' may represent either a person's gender identity or their sex assigned at birth, depending on how the information was collected.

Not represented in Figures 6 & 8: <1% of both chronic and acute case reports had either 'unknown' or 'other' gender/sex indicated, and <1% of chronic cases had missing age information.

Figure 9. All Hepatitis C Infections (Acute and Chronic) by Race & Ethnicity, 2021



Race & Ethnicity

Cases are classified as 'Hispanic or Latino' if indicated as ethnicity. Otherwise (if ethnicity is reported as either 'Not Hispanic or Latino,' 'Unknown,' or missing), cases are categorized based on reported race. Abbreviations: AI/AN - American Indian/Alaska Native; NHOPI - Native Hawaiian/other Pacific Islander.

In the United States during 2020, the rates of newly reported infections of both <u>chronic</u> and <u>acute hepatitis C</u> were highest among AI/AN persons, followed by White and Black persons. Of the 14,863 <u>hepatitis-C associated deaths</u>, 63% were among White persons, though death rates were highest among AI/AN and Black persons (3.2 and 1.8 times the rate of Whites).

## Injection drug use (IDU) is a common risk factor for acute hepatitis C

Among all case reports for people who were diagnosed with acute hepatitis C in 2021 (122 case reports), 66.4% indicated IDU as a risk factor for infection, and 77% indicated recent substance use (including IDU).

Infection risk is determined by an investigator. Overall reporting may vary based on whether an investigator is able to reach a patient for interview, and if the exposure information is reported by the patient or a provider. Reporting may also be impacted due to stigma related to substance use.

Data on reported risk factors in the United States in 2020 are <u>available here</u>.

# Pregnancy and risk for perinatal hepatitis C

Hepatitis C can be transmitted from mother or birthing parent to baby during pregnancy. This occurs in approximately 6% of pregnancies where the mother or birthing parent has hepatitis C.

**Perinatal hepatitis C** is an infection among infants and toddlers (aged two months-36 months) and became a reportable condition in 2018.

Hepatitis C treatment is not currently approved for use during pregnancy; however, once the parent has given birth and completed breastfeeding, it is safe to begin this treatment. Children can begin treatment starting at three years of age.

From 2018-2021, there were 14 reported perinatal hepatitis C infections among infants and toddlers in WA.

## For more information

- DOH: <u>https://doh.wa.gov/you-and-your-family/illness-and-disease-z/hepatitis-information/hepatitis-c</u>
- CDC: <u>https://www.cdc.gov/hepatitis/hcv/ind</u> <u>ex.htm</u>
- Testing recommendations: <u>https://www.cdc.gov/hepatitis/hcv/guid</u> <u>elinesc.htm</u>

## References

- Centers for Disease Control and Prevention. Viral Hepatitis Surveillance Report – United States, 2020. <u>https://www.cdc.gov/hepatitis/statistics</u> /2020surveillance/index.htm. Published September 2022.
- WA Office of Financial Management population and demographics data, used to determine state and county population sizes by year: <u>https://ofm.wa.gov/washington-dataresearch/population-demographics</u>
- HIV/AIDS Epidemiology Unit, Public Health – Seattle & King County and the Infectious Disease Assessment Unit, Washington State Department of Health. <u>HIV/ AIDS Epidemiology Report</u> 2022, Volume 91.

## **Contact information**

Hepatitis C Surveillance Program Assessment Unit Office of Infectious Disease Disease Control and Health Statistics Division Washington State Department of Health 360-236-3444 | <u>Hepatitis@doh.wa.gov</u>